

LSEL EcoLine Series

Active Extended L-Band Splitters (4-way, 8-way, 16-way)

The LSEL EcoLine series represents reliable active L-Band splitters in a 1RU/19" rack mount design. They are available as single splitters (1:4, 1:8, 1:16), dual splitters (2 x 1:4, 2 x 1:8 and 2 x 1:16) and quad splitters (4 x 1:4, 4 x 1:8).

The units operate at the extended L-Band frequency range (850 – 2450MHz) ready for KA-Band and HTS applications and allow easy splitting of one input to up to 16 outputs with zero loss.

Additionally, the units feature switchable LNB-supply while an external 10MHz reference port and 1:1 redundant dual power supply are optionally available. Colored front side LED´s display the health status of each power supply and LNB-supply.

The LSEL EcoLine splitters are a perfect fit for Satellite-, Broadcast and Broadband RF distribution infrastructures at Teleports, Satellite Earth Stations or Cable/IPTV operations.



FEATURES & BENEFITS

- Space saving 1RU/19" rack mount design
- Extended L-Band frequency range 850 – 2450MHz
- Single 1:4, 1:8 and 1:16 splitters
- Dual 1:4, 1:8 and 1:16 splitters
- Quad 1:4 and 1:8 splitters
- Various RF impedances & connectors available
- Internally amplified zero loss active splitter units
- Switchable LNB-supply 24VDC/400mA (ON/OFF)
- 10MHz external reference port (Option 096-1 / Option 096-2)
- 10MHz & DC Through (Option 095)
- 1:1 redundant power supply (Option 097)

TECHNICAL SPECIFICATIONS

Dimensions:	1RU/19" rack mount, only 150mm deep
Power Supply:	Single 85 – 230V, 50/60Hz & fuse 1A (1:1 redundant PSU Option 097)
Power Consumption:	<10W (without LNB-supply) / <20W (with LNB-supply)
Frequency Range:	850 – 2450MHz (extended L-Band)
Input/Output Connectors:	50Ohm SMA(f), 75Ohm F(f), 50Ohm BNC(f)*, 75Ohm BNC(f)*
Input RF Power:	+23dBm max.

Input/Output Return Loss:	14dB min.
Noise Figure:	9dB typ.
Isolation:	20dB min., 23dB typ.
Insertion Loss:	0dB typ., ±1.5dB max.
Frequency Response:	50Ohm Type: ±1.5dB typ. ±2.0dB max, ±0,25dB @ any 36MHz 75Ohm Type: ±2.0dB typ. ±2.5dB max, ±0,3dB @ any 36MHz
P1dB:	+4dBm typ.
IMA3 @ -10dBm:	-50dBc typ.
SFDR:	< - 80dBm
Switchable LNB-Supply:	24VDC (ON/OFF), 400mA
10MHz Reference Port:	50Ohm SMA(f) rear-side (Option 096-1 / Option 096-2)
Status LED´s:	Unit power supply, LNB-supply
Operating Temperature:	0°C to 50°C
Storage Temperature:	-20° to 75°C
MTBF:	390khours MIL-HDBK-217F (25°C)
Humidity:	90%, non-condensing
RoHS:	Compliant

on request

ORDER INFORMATION

Type with 50Ohm SMA(f) Connectors

Module Type	Type No.	Short Description
LS104EL-50S	9001168	Active extended L-Band Splitter, 1 x 1:4, LNB-supply, 50Ohm SMA(f), 1RU/19" rack mount
LS108EL-50S	9000751	Active extended L-Band Splitter, 1 x 1:8, LNB-supply, 50Ohm SMA(f), 1RU/19" rack mount
LS116EL-50S	9000755	Active extended L-Band Splitter, 1 x 1:16, LNB-supply, 50Ohm SMA(f), 1RU/19" rack mount
LS2104EL-50S	9001225	Active Dual extended L-Band Splitter, 2 x 1:4, LNB-supply, 50Ohm SMA(f), 1RU/19" rack mount
LS2108EL-50S	9000768	Active Dual extended L-Band Splitter, 2 x 1:8, LNB-supply, 50Ohm SMA(f), 1RU/19" rack mount
LS2116EL-50S	9000772	Active Dual extended L-Band Splitter, 2 x 1:16, LNB-supply, 50Ohm SMA(f), 1RU/19" rack mount
LS4104EL-50S	on request	Active Quad extended L-Band Splitter, 4 x 1:4, LNB-supply, 50Ohm SMA(f), 1RU/19" rack mount
LS4108EL-50S	on request	Active Quad extended L-Band Splitter, 4 x 1:8, LNB-supply, 50Ohm SMA(f), 1RU/19" rack mount

Type with 50Ohm BNC(f) Connectors

Module Type	Type No.	Short Description
LS104EL-50B	9000748	Active extended L-Band Splitter, 1 x 1:4, LNB-supply, 50Ohm BNC(f), 1RU/19" rack mount
LS108EL-50B	9001170	Active extended L-Band Splitter, 1 x 1:8, LNB-supply, 50Ohm BNC(f), 1RU/19" rack mount
LS116EL-50B	9000756	Active extended L-Band Splitter, 1 x 1:16, LNB-supply, 50Ohm BNC(f), 1RU/19" rack mount
LS2104EL-50B	9000765	Active Dual extended L-Band Splitter, 2 x 1:4, LNB-supply, 50Ohm BNC(f), 1RU/19" rack mount
LS2108EL-50B	9000769	Active Dual extended L-Band Splitter, 2 x 1:8, LNB-supply, 50Ohm BNC(f), 1RU/19" rack mount
LS2116EL-50B	9000773	Active Dual extended L-Band Splitter, 2 x 1:16, LNB-supply, 50Ohm BNC(f), 1RU/19" rack mount
LS4104EL-50B	on request	Active Quad extended L-Band Splitter, 4 x 1:4, LNB-supply, 50Ohm BNC(f), 1RU/19" rack mount
LS4108EL-50B	on request	Active Quad extended L-Band Splitter, 4 x 1:8, LNB-supply, 50Ohm BNC(f), 1RU/19" rack mount

Type with 75Ohm F(f) Connectors

Module Type	Type No.	Short Description
LS104EL-75F	9000749	Active extended L-Band Splitter, 1 x 1:4, LNB-supply, 75Ohm F(f), 1RU/19" rack mount
LS108EL-75F	9000753	Active extended L-Band Splitter, 1 x 1:8, LNB-supply, 75Ohm F(f), 1RU/19" rack mount
LS116EL-75F	9000757	Active extended L-Band Splitter, 1 x 1:16, LNB-supply, 75Ohm F(f), 1RU/19" rack mount
LS2104EL-75F	9000766	Active Dual extended L-Band Splitter, 2 x 1:4, LNB-supply, 75Ohm F(f), 1RU/19" rack mount
LS2108EL-75F	9000770	Active Dual extended L-Band Splitter, 2 x 1:8, LNB-supply, 75Ohm F(f), 1RU/19" rack mount

LS2116EL-75F	9001105	Active Dual extended L-Band Splitter, 2 x 1:16, LNB-supply, 75Ohm F(f), 1RU/19" rack mount
LS4104EL-75F	on request	Active Quad L-Band Splitter, 4 x 1:4, LNB-supply, 75Ohm F(f), 1RU/19" rack mount
LS4108EL-75F	on request	Active Quad L-Band Splitter, 4 x 1:8, LNB-supply, 75Ohm F(f), 1RU/19" rack mount

Type with 75Ohm BNC(f) Connectors

Module Type	Type No.	Short Description
LS104EL-75B	9000750	Active extended L-Band Splitter, 1 x 1:4, LNB-supply, 75Ohm BNC(f), 1RU/19" rack mount
LS108EL-75B	9001306	Active extended L-Band Splitter, 1 x 1:8, LNB-supply, 75Ohm BNC(f), 1RU/19" rack mount
LS116EL-75B	9000758	Active extended L-Band Splitter, 1 x 1:16, LNB-supply, 75Ohm BNC(f), 1RU/19" rack mount
LS2104EL-75B	9000767	Active Dual extended L-Band Splitter, 2 x 1:4, LNB-supply, 75Ohm BNC(f), 1RU/19" rack mount
LS2108EL-75B	9000771	Active Dual extended L-Band Splitter, 2 x 1:8, LNB-supply, 75Ohm BNC(f), 1RU/19" rack mount
LS2116EL-75B	9000775	Active Dual extended L-Band Splitter, 2 x 1:16, LNB-supply, 75Ohm BNC(f), 1RU/19" rack mount
LS4104EL-75B	on request	Active Quad extended L-Band Splitter, 4 x 1:4, LNB-supply, 75Ohm BNC(f), 1RU/19" rack mount
LS4108EL-75B	on request	Active Quad extended L-Band Splitter, 4 x 1:8, LNB-supply, 75Ohm BNC(f), 1RU/19" rack mount

OPTIONS

Type	Type No.	Short Description
Option 096-1	9000777	10MHz external reference input, feed to Common Port (Single Unit)
Option 096-2	9001183	10MHz external reference input, feed to Common Port (Dual Unit)
Option 097	9001165	Redundant Power Supply for EcoLine Splitter and Combiner Single and Dual Version
Option 095	9001176	10MHz and DC Through, Port #1 to Common Port, for EcoLine & BaseLine Splitters and Combiners
Option10M - 10MHz Internal Source	9001531	10MHz sine Wave, +5dBm, Aging ±500 ppb max. @ 10 years: Phase Noise -90 dBc @ 1 Hz, -120 dBc @ 10 Hz, -142 dBc @ 100 Hz, -155 dBc @ 1 kHz, -160 dBc @ 10 kHz.

RF-Design GmbH | Lahnstr. 13 | 64625 Bensheim | Germany
Phone: +49 (0) 6251 80 384 – 0 | E-Mail: contact@rf-design-online.de | Web: www.rf-design-online.de

CE ISO 9001 2015 CERTIFIED RoHS Compliant